

## **What about Dual-Earner Households in Jobs-Housing Balance Research? An Essential Issue in Transport Geography**

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### **Abstract:**

Within the last decade considerable concern has been expressed about increasing commuting times and their associated negative effects on traffic congestion and air pollution within metropolitan areas. The links between commuting time and low-density, dispersed urban forms have emerged as culprits, with attention often focused on how to reshape cities in ways that can help reduce these problems. The idea of creating a balance between jobs and housing within different commuting catchment areas of a city has been prominent for some time in academia, as well with policy makers, as an urban and transportation policy for reducing these problems. The concept of jobs-housing balance states that all areas of a city should have sufficient housing for employees near employment concentrations, and vice versa.

**Keywords:** transportation | commuting | employment | residential locations | dual-earner households | jobs-housing balance

### **Article:**

In the last half-century urban and transport geographers have done hundreds of studies to describe the geographical pattern of commuter flows within and among urban areas, and have documented the travel behavior of various groups of workers (Wyly, 1998). Within the last decade considerable concern has been expressed about increasing commuting times and their associated negative effects on traffic congestion and air pollution within metropolitan areas. The links between commuting time and low-density, dispersed urban forms have emerged as culprits, with attention often focused on how to reshape cities in ways that can help reduce these problems. The idea of creating a balance between jobs and housing within different commuting catchment areas of a city has been prominent for some time in academia, as well with policy

makers, as an urban and transportation policy for reducing these problems. The concept of jobs-housing balance states that all areas of a city should have sufficient housing for employees near employment concentrations, and vice versa. This concept also requires that the price and other characteristics of housing in an area should be suitable for the workers (such as for the mix of income and occupational groups) who hold jobs there. The more balanced the mix of jobs and housing in an area, the closer workers can locate to their workplace, and the shorter their commutes will be (Cervero, 1989, Frank and Pivo, 1994, Sultana, 2002 and Horner, 2004).

The topic of job-housing balance and commuting research has naturally attracted attention from those working in many areas of urban transportation research. However, the theoretical merits and implications of the jobs-housing balance have been hotly debated, and the issue is far from resolved. Some studies clearly emphasize that job-housing imbalances are related to many urban problems, including congestion, lack of affordable housing and racial segregation, thereby requiring policy intervention (Cervero, 1989, Frank and Pivo, 1994, Sultana, 2002, Horner and Murray, 2003 and Horner, 2004). In contrast, critics of jobs-housing balance as transport policy argue that the potential to alter residential location exists, but it is clearly limited for many reasons (Giuliano and Small, 1993 and Levine, 1998). This is especially so as this approach deliberately assumes that households attempt to minimize the time they spend commuting to work when they choose residential locations. This may not be the case.

While Horner (2004) discussed several major issues that need to be further examined to resolve many of these issues, another important unresolved issue is the effect of dual-earner households on jobs-housing balance. Since the 1970s numerous challenges to traditional approaches in geography have come from the absence of gender in many models (Polk, 2004). While transport geographers have generally accepted the need to include women, it would be a mistake if researchers do not also incorporate changes in family structure, including those that pose significant challenges to the jobs-housing balance concept. As is well known, since the 1970s female labor force participation in the US has greatly increased, from 40% to 61% between 1970 and 2002. The most dramatic increase occurred among married women, resulting in a growing number of dual-earner households (US Department of Labor, 2004). Currently, 51% of married couple households have two workers, compared to only 19% of all families in which only the husband works (US Department of Labor, 2004).

This ongoing shift towards dual-earner households presents fundamental challenges to the standard commuting model, which assumes only a single wage earner (Giuliano, 1991 and Levine, 1998). The location decisions made by dual-earner households are naturally more complex than standard household location theory allows (Hanson and Pratt, 1988), as living near one household member's job may mean living far from the other (Cervero, 1989, Dubin, 1991, Giuliano and Small, 1993, Johnston-Anumonwo, 1992, Waddell, 1996 and Green, 1997). This can occur despite the fact that an area within the city may be balanced in jobs and housing (Merriman et al., 1995 and Ommeren et al., 1998). And hence, it

has been argued that it is impossible to implement job-housing balance concept due to the shift in American family structure from single-earner to dual-earner households (Levine, 1998).

The continuing growth of female labor force participation over the last three decades has stimulated considerable theoretical and empirical research on gender differences in travel behavior (e.g., Blumen, 1994 and Timmermans et al., 2003) and mode choices (Polk, 2004 and Best and Lanzendorf, 2005) in general. A few researchers have also specifically addressed gender differences in the commuting patterns of dual-earner families (e.g., Singell and Lillydahl, 1986, Johnston-Anumonwo, 1992, Wyly, 1998, Hjorthol, 2000 and Sermons and Koppelman, 2001). The weight of empirical evidence of shorter work trips for wives seems to contradict the assumption that dual-worker households have a more difficult time minimizing their commute duration. It is unfortunate, however, that despite the growing significance of dual-earner households and its ambiguous effect on job-housing balance, until now transport researchers have paid little attention to understanding commuting time differences between single- and dual-earner households, and the extent to which commuting flow volumes are increasingly the result of dual-earner households, rather than from the result of job/housing imbalances.

This is by no means a straightforward question, as within the limited scrutiny of dual-earner households there is a discrepancy. European research found no evidence in favor of the hypothesis that households with both partners employed have longer commuting distances compared to one-partner working households (Rouwendal and Rietveld, 1994 and Green, 1997). In contrast, empirical evidence from the US is mixed. Kim's (1995) findings from Los Angeles suggested that even though households, both dual- or one-earner, attempt to minimize commuting distance, two-worker households have more excess commuting than single-earner households. Similarly, using data from the Seattle area, Clark et al. (2003) reported that both single- and dual-earner households reduce commuting distances if they move from one residence to another, but pre- and post-move commutes are slightly higher for dual-earner households. On the other hand, drawing on the 2000 5% PUMS dataset for metropolitan Atlanta, Sultana's (2005) analysis shows that dual-earner households are more likely to reduce their commuting time compared to single-earner households, despite the fact that they may have more problems in balancing home and work locations. Her findings also confirm that husbands in dual-earner households have shorter commutes than husbands in single-earner households, and hence the presence of wives in labor markets do not significantly lengthen husbands' commuting time in dual-earner households.

The growth in dual-earner households increases other challenges to jobs-housing balance measurement. Defining the relevant zones in which to measure balances has been a difficulty, and of course different definitions will produce greatly varying results (Levine, 1998). While many studies have suggested using a reasonable commute distance, defining this range has remained difficult (Sultana, 2002). Furthermore, the dispersed employment of US metropolitan

areas implies overlapping commutersheds, rather than discrete zones. Resolving both of these issues will become even trickier with increasing numbers of dual-earner households. It is essential that future research should reevaluate the theoretical assumption of dual-earner household's commuting behavior and the implications for the jobs-housing balance concept, in order to gain a clearer understanding of urban transportation and land use changes within American cities. Future research should utilize various data sources, such as travel diaries, longitudinal data sets, or surveys of individual workers based on household structure, and especially their preference of jobs or housing location choice, so that transport planners can predict travel demands that will result from the continuing growth of these households.

At a time when it is common to discuss spatial policies for changing transport behavior, the importance of the household level remains crucial to any understanding of trends. Other transport issues involving changing household structures should also be addressed. The rise of labor force participation for married women with young children has risen even faster than for all dual-earner households, with 69% of married mothers in paid labor in 2002 (US Department of Labor, 2004). Commuting can obviously be expected to interact with school transportation to an even greater degree in the future, as greater numbers of parents include dropping off or picking up one or more children at school and other activities as part of their daily commuting routine. These demographic and family issues are a fundamental challenge, and perhaps the greatest challenge, to transport researchers examining commuting and the interactions between urban form, residential location, and commuting. The spatial relationships between home and work remain important, but their nature and importance are influenced by the changing urban and family social environments as well. These issues must be addressed before any definitive conclusion can be drawn about the feasibility of implementing the job/housing balance concept as an urban and transport policy. In this way, addressing the existence and behavior of dual-earner households can enrich the field of transport geography and its understanding of commuting.

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